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AUTHOR	Rowand, Cassandra
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ABSTRACT

This brief suggests that the condition of the nation's schools continues to be a problem because they are becoming increasingly obsolete and contain environmental hazards. This report provides data on the increase in school construction between 1950 and 1969 (corresponding to the Baby Boom generation); the percent of schools in oldest, moderate, and newest condition; and the condition of the schools by school characteristics as of 1995. Findings show that the average public school building age is 42 years, almost half were built between 1950 and 1969; 73 percent have undergone at least one major renovation; and of the schools built in 1985 or later, 59 percent were connected to the Internet in 1995, whereas 42 percent of those schools built before 1969 and renovated berfore 1980 (or never renovated) were connected. (GR)

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ISSUE BRIEF

How Old Are America's Public Schools?

January 1999

The condition of America's public school facilities is an issue of great concern to educators and administrators (Honeyman, 1994; Kowalski, 1995). In 1989, the Education Writers Association reported that nearly half of the public school buildings in America were obsolete and contained environmental hazards (Lewis, 1989). The state of America's school facilities continues to be a problem today. In his 1997 State of the Union Address, President Clinton remarked, "We cannot expect our children to raise themselves up in schools that are literally falling down. With the student population at an all time high, and record numbers of school buildings falling into disrepair, this has now become a serious national concern" (Clinton, 1997).

How old are America's public schools? How recently have public schools been renovated? Data available from the Fast Response Survey System (FRSS), conducted by the National Center for Education Statistics (NCES), can be used to help answer these questions. In 1994, 1995, and 1996, FRSS queried U.S. public school administrators about the age of their school buildings and the date of the building's last renovation. The combined data from these 3 years make it possible to help determine the average age of public schools, where the older and newer public schools are located, and whether school age is related to other school characteristics. Data from 1995 provide information on school renovation and Internet accessibility.

The increase in the construction of schools between 1950 and 1969 corresponds to the years during which the Baby Boom generation was going to school.

In 1998, the average public school building in the United States was 42 years old. The mean age ranged from 46 years in the Northeast and Central states to 37 years in the Southeast (table 1). On average, schools located in the Northeast and Central regions of the country were older than those located in the Southeast and the West. Many of America's schools may be at an age where frequent repairs are necessary. According to Ornstein (1994), when a school is 20 to 30 years old, frequent replacement of equipment is needed. Between 30 and 40 years old, the original equipment should have been replaced, including the roof and electrical equipment. After 40 years, a school building begins rapid deterioration, and after 60 years most schools are abandoned.

About one-fourth (28 percent) of all public schools were built before 1950, and 45 percent of all public schools were built between 1950 and 1969 (table 1). Seventeen percent of public schools were built between 1970 and 1984, and 10 percent were built after 1985. The increase in the construction of schools between 1950 and 1969 corresponds to the years during which the Baby Boom generation was going to school.

America's oldest schools have a higher proportion of children in poverty (table 1). Of schools with less than 20 percent of children eligible for free or reduced-price school lunch, 20 percent were built before 1950. In contrast, of schools with 20 to 49 percent and 50 percent or more children eligible for free or reduced-price school lunch, 29 percent and 34 percent were built before 1950. The age of a school and its size are also related. While 40 percent of small schools (enrollments of less than 300) were built before 1950, 23 percent of large schools (enrollments of 1,000 or more) were built before 1950.

Table 1.—Year of school construction and mean age of school, by school characteristics

School characteristic	Year built: Before 1950	1950–1969	1970–1984	1985 or after	Mean age
	(Percent of schools)				
All public schools	**28**	**45**	**17**	**10**	**42**
Instructional level					
Elementary	29	46	15	11	43
Secondary	24	46	23	8	40
Size of enrollment					
Less than 300	40	39	14	8	48
300 to 999	24	48	17	11	40
1,000 or more	23	44	22	11	39
Locale					
City	34	44	13	9	46
Urban fringe	20	53	17	10	40
Town	24	47	20	9	40
Rural	32	38	17	12	42
Region					
Northeast	30	49	15	6	46
Southeast	23	43	20	14	37
Central	33	46	14	8	46
West	25	44	19	13	39
Percent of students eligible for free or reduced-price school lunch					
Less than 20 percent	20	48	20	11	39
20 to 49 percent	29	44	16	11	41
50 percent or more	34	42	14	10	44

NOTE: Percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Advanced Telecommunications in U.S. Public Schools, Fall 1996," FRSS 61, 1996; "Survey on Advanced Telecommunications in U.S. Public Schools, K–12," FRSS 57, 1995; "Survey on Advanced Telecommunications in U.S. Public Schools, K–12," FRSS 51, 1994.

Seventy-three percent of public schools report having undergone at least one major renovation.

In 1995, FRSS also collected data on the year that schools underwent their last major renovation. About three-fourths (73 percent) of schools reported having undergone at least one major renovation; 17 percent reported last undergoing a major renovation prior to 1980, 17 percent reported the last major renovation between 1980 and 1989, and 39 percent reported the last major renovation between 1990 and 1995 (table 2). Unlike the age of school buildings, the year since the last major renovation is not significantly related to the enrollment size, locale, or region (data not shown). Of the school buildings that have never undergone a major renovation, 50 percent are at least 25 years old.

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A measure combining age of school and year of renovation represents a rough approximation of "condition" of schools, assuming that all other building conditions were equal. Thus, schools built before 1970 and either never renovated or renovated prior to 1980 would be in the "oldest condition"—29 percent of all public schools fell into this category. Those schools built before 1970 and renovated 1980 or later or built between 1970 and 1985 may be considered to be in "moderate condition"—61 percent of all schools were in this category. The remaining schools, those built 1984 or after, are in the "newest condition"—10 percent of America's public schools fell into this category in 1995 (table 2).

Table 2.—Percent of schools in oldest, moderate, and newest condition, by the year built and last major building renovation

		Year built			
Year of last major renovation	Total	Before 1950	1950–1969	1970–1984	1985 or after
Total	100	26	46	19	10
Never	27	2	12	8	
Before 1980	17	9	7	1	
1980–1989	17	5	8	3	
1990–1995	39	10	19	7	

☐ Schools in the "oldest" condition.

■ Schools in the "newest" condition.

— Not applicable.

* Percentages sum to 30 rather than 29 due to rounding.

NOTE: Percentages may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Advanced Telecommunications in U.S. Public Schools, K–12," FRSS 57, 1995.

The percentage of schools in the "oldest" condition (i.e., 29 percent are more than 25 years old, or were renovated almost 20 years ago) is a concern to educators and policymakers. While newer schools are more likely to be built with convenient connections to the Internet, there is reason for concern that schools in the "oldest" condition may be lagging behind in the nationwide push to connect all schools to the Internet by the year 2000. In fact, of schools in the "oldest" condition, 42 percent were connected to the Internet in 1995, whereas of schools in the "newest" condition, 59 percent were connected to the Internet (data not shown). Schools located on the urban fringe and in the Central region of the country were more likely to be in the "oldest" condition than schools located in towns and in the Southeast region, respectively (table 3; 36 percent compared to 22 percent and 36 percent compared to 21 percent). In contrast, schools in the West region were more likely to be in the "newest" condition than schools located in the Northeast and Central regions (15 percent compared to 5 and 6 percent, respectively). No differences were found among schools in the likelihood of being in the "oldest" and "newest" condition in terms of the percent of students eligible for free or reduced-price lunch.

Summary

A number of important findings regarding the age of schools buildings were gleaned from the Fast Response Surveys.

- The average age of public school buildings in the United States is 42 years.

Table 3.—Condition of school, by school characteristics: 1995

	Condition of school		
School characteristic	Oldest	Moderate	Newest
All public schools	**29**	**61**	**10**
Instructional level			
Elementary	30	60	10
Secondary	28	65	7
Size of enrollment			
Less than 300	36	58	6
300–999	27	62	11
1,000 or more	25	64	12
Locale			
City	32	57	11
Urban fringe	36	54	10
Town	22	71	7
Rural	28	61	11
Region			
Northeast	33	62	5
Southeast	21	68	11
Central	36	57	6
West	25	59	15
Percent of students eligible for free or reduced-price school lunch			
Less than 20 percent	28	61	11
20–49 percent	31	59	10
50 percent or more	29	63	7

NOTE: Percentages may not sum to 100 due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Advanced Telecommunications in U.S. Public Schools, K–12, FRSS 57, 1995."

- Almost half (45 percent) of U.S. public schools were built between 1950 and 1969.
- Seventy-three percent of school buildings reported having had at least one major renovation.
- Of schools built in 1985 or later, 59 percent were connected to the Internet in 1995, whereas 42 percent were connected among schools built before 1969 and renovated before 1980 (or never renovated).

Other References and Related Publications

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Issue Briefs present information on education topics of current interest. All estimates shown are based on samples and are subject to sampling variability. All differences are statistically significant at the 0.05 percent level. In the design, conduct, and data processing of NCES surveys, efforts are made to minimize the effects of nonsampling errors, such as item nonresponse, measurement error, data processing error, or other systematic error. The data reported in this **Issue Brief** have been combined from 3 separate independent surveys—1994, 1995, and 1996. There is a potential for a small amount of bias associated with the absence of schools built between the administration of each of the three surveys and 1998.

This **Issue Brief** was prepared by Cassandra Rowand. To obtain standard errors or definitions of terms for this **Issue Brief**, or to obtain additional information about the Fast Response Survey System or the FRSS telecommunications surveys, contact Edie McArthur at NCES 202-219-1442. To order additional copies of this **Issue Brief** or other NCES publications, call 1-877-4ED-PUBS. NCES publications are available on the Internet at http://www.ed.gov/NCES/pubs.